DESMOGONIUS DESMOGONIUS, A NEW SPECIES AND GENUS OF MONOSTOME FLUKES

BY

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(*Received for publication* 20 *November*, 1911)

Some half-dozen flukes were found by Prof. R. Newstead in the alimentary canal of an edible Nicaraguan turtle (*Chelone mydas*), that died on board ship off Jamaica. They formed part of the collection of the 23rd Expedition of the Liverpool School of Tropical Medicine.

The colour in life was blood red. They were placed in salt solution, as no fixative was available. On coming into my possession they were gradually transferred to glycerine. The following description is based on the examination of a single specimen, as the rest of the material was lost. Though incomplete, yet I think it is sufficient for establishing a new genus.

The body is concavo-convex, 5·2 mm. long by 1·8 mm. The skin has no scales. It is pointed anteriorly and rounded posteriorly, where it is furnished with two conical protuberances. The head possesses no collar.

The alimentary tract.—Oral sucker is spherical, and has a diameter of 0·45 mm. This is followed by a short oesophagus. The gut caeca run almost to the extreme posterior end on either side. They are characterized by numerous short lateral branches internally and externally. The arrangement appears to be essentially the same as that in the genus *Charaxicephalus*.

The common genital pore lies on the left side of the body about 2 mm. from the anterior extremity, just in front of the uterine

coils and external to the left caecum. Cirrus pouch present, lying between the gut caeca, about a millimetre behind the posterior border of the sucker, and followed by a curved seminal vesicle.

The testes are split up into a number of spherical parts. These on each side form a chain, not only external to the uterine coils, but also to the gut caeca, and almost completely anterior to the vitellaria with the exception of the last one or two. The right testis is divided into eight parts and the left into seven parts.

The ovary.—Slightly to the right of the mid-line, and slightly behind the level of the posterior vitellarian acini is apparently globular, but no details were recognisable.

The vitellaria, situated in the posterior third of the body, lie outside the uterine coils overlapping the gut caeca and commence slightly anterior to and internal to the last division of the testes. The follicles are not split up to the extent they are in *Charaxicephalus*. They consist of a number of follicles to some extent arranged in groups. The transverse vitelline duct runs from the posterior extremity of the vitellaria on each side obliquely towards the middle line into a vitelline receptacle.

Eggs.—Operculate, 33 × 15 μ, with a tuft of long filaments at each pole.

Looss (1902) in his key for determining the genera of the Pronocephalidae gives the following classification:—

1. Mit 2 seitlich der Mitellinie gelegenen einfachen Hoden, Keimstock vor ihnen (2).

Mit 2 ebenfalls seitlich gelegenen Hoden, deren jeder in eine Anzahl hinter einander gelegener Theilstücke zerfallen ist; Keimstock hinter ihnen; Darmschenkel sowohl wie der Schenckel der Excretionsblase mit Seitenzweigen; Körper hinten in 2 stumpf conische Fortsätze auslaufend .....*Charaxicephalus*.

The present genus closely resembles *Charaxicephalus* (1) in the fact that the testes are split up into a number of parts, and (2) that the ovary lies behind them. (3) In the presence of two bluntly conical appendages posteriorly. (4) The gut caeca reach the posterior extremity and are provided with lateral appendages internally. (5) The eggs are provided with a tuft of filaments.

It differs from it, however, in the following points:

1. There is no collar.
2. The testes are situated external to the gut caeca and form a chain on each side.
3. The common genital pore opens external to the gut caecum.
4. The vitellaria occupy the posterior third (not posterior half).

I propose,* therefore, to make for this fluke a new genus, for which I suggest the name *Desmogonius*, and for the specific name also *desmogonius*.

LITERATURE

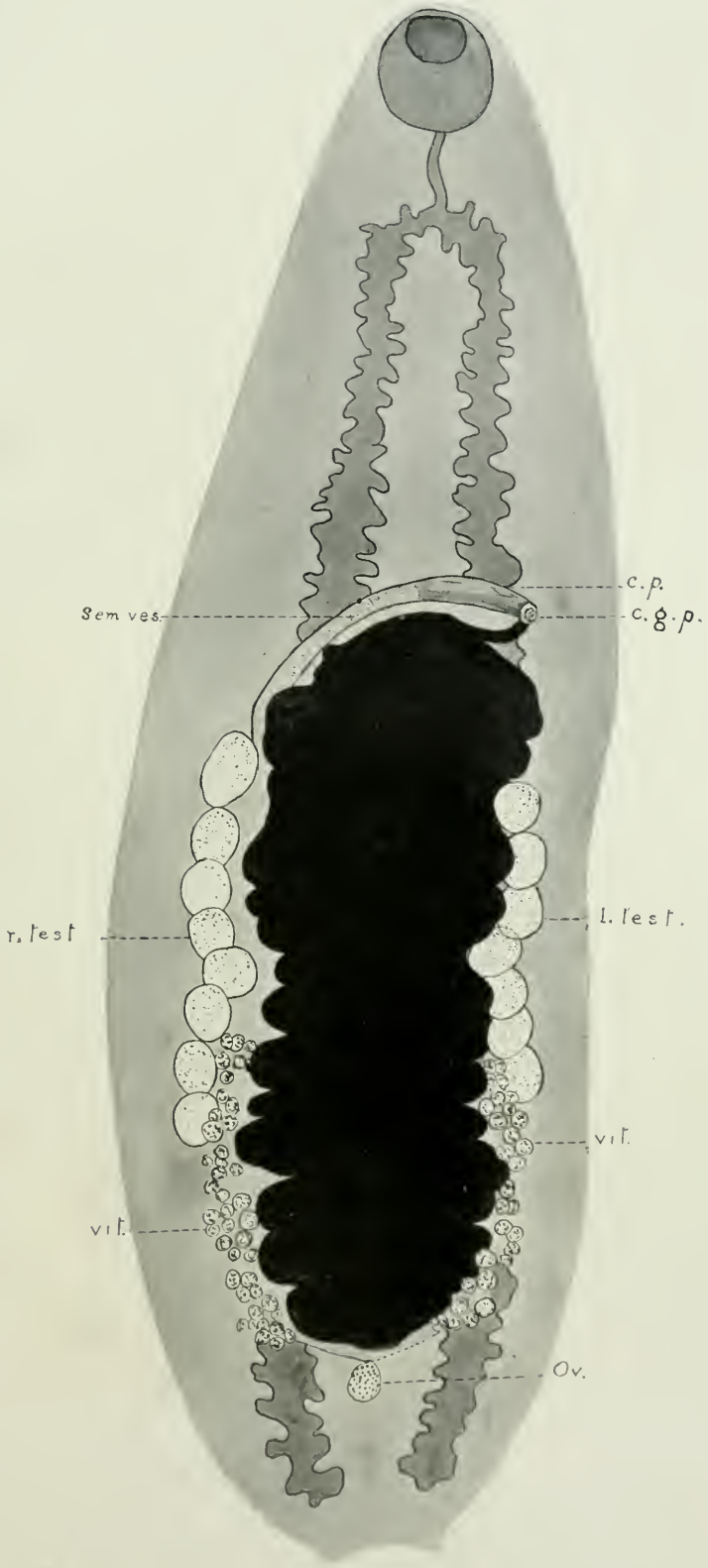
Looss, A. (1902) Ueber neue und bekannte Trematoden aus Seeschildkröten. Zool. Jahrb., Abth. f. Syst., Bd. XVI.

* Professor Looss, who kindly examined the fluke for me, informed me that it must be separated from other genera of the Pronocephalidae.

PLATE XXIII

Desmogonius desmogonius × 40.

sem. ves. = seminal vesicle.
c. p. = cirrus pouch.
c. g. p. = common genital pore.
r. testis = right testis.
l. testis = left testis.
vit. = vitelline glands.
ov. = ovary.


c.p.
Sem ves.
c.g.p.
r. test
l. test.
vit.
vit.
Ov.